AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Listing of Claims:

1. (Original): A process for the manufacture of 3-phytyl-2,5,6-trimethylhydroquinone-1-acetate, and optionally therefrom tocopheryl acetate, which comprises either

(a) C-alkylating 2,3,6-trimethylhydroquinone-1-acetate with isophytol or phytol in the presence of a sulphur(VI) containing catalyst of the formula R^1SO_2OH, wherein R^1 signifies hydroxy, halogen, lower alkyl, halogenated lower alkyl or aryl, in an aprotic organic solvent, or

(b) O-alkylating 2,3,6-trimethylhydroquinone-1-acetate with a phytyl halide in a polar aprotic organic solvent in the presence of a base, and subjecting the so-obtained 4-O-phytyl-2,3,6-trimethylhydroquinone-1-acetate to a rearrangement reaction,

and in each case optionally submitting the so-obtained 3-phytyl-2,5,6-trimethylhydroquinone-1-acetate to a ring closure reaction to produce tocopheryl acetate.

2. (Original): A process according to claim 1 for the manufacture of 3-phytyl-2,5,6-trimethylhydroquinone-1-acetate, which comprises C-alkylating 2,3,6-trimethylhydroquinone-1-acetate with isophytol or phytol in the presence of a sulphur(VI) containing catalyst of the formula R^1SO_2OH, wherein R^1 signifies hydroxy, halogen, lower alkyl, halogenated lower alkyl or aryl, in an aprotic organic solvent.

3. (Original): A process according to claim 1 for the manufacture of 3-phytyl-2,5,6-trimethylhydroquinone-1-acetate, which comprises O-alkylating 2,3,6-

trimethylhydroquinone-1-acetate with a phytyl halide in a polar aprotic organic solvent in the presence of a base, and subjecting the so-obtained 4-O-phytyl-2,3,6-trimethylhydroquinone-1-acetate to a rearrangement reaction.

4. (Currently amended): A process for the manufacture of tocopheryl acetate according to claim 1, which comprises submitting 3-phytyl-2,5,6-trimethylhydroquinone-1-acetate or an isomer thereof to a ring closure reaction by treating said acetate with an acidic catalyst in the presence or absence of a solvent.

5. (Original): A process according to claim 1 for the manufacture of tocopheryl acetate, which comprises C-alkylating 2,3,6-trimethylhydroquinone-1-acetate with isophytol or phytol in the presence of a sulphur(VI) containing catalyst of the formula R^1SO_2OH, wherein R^1 signifies hydroxy, halogen, lower alkyl, halogenated lower alkyl or aryl, in an aprotic organic solvent, and submitting the so-obtained 3-phytyl-2,5,6-trimethylhydroquinone-1-acetate to a ring closure reaction by treating it with an acidic catalyst in the presence or absence of a solvent to produce the tocopheryl acetate.

6. (Original): A process according to claim 1 for the manufacture of tocopheryl acetate, which comprises O-alkylating 2,3,6-trimethylhydroquinone-1-acetate with a phytyl halide in a polar aprotic organic solvent in the presence of a base, subjecting the so-obtained 4-O-phytyl-2,3,6-trimethylhydroquinone-1-acetate to a rearrangement reaction, and submitting the so-obtained 3-phytyl-2,5,6-trimethylhydroquinone-1-acetate to a ring closure reaction by treating it with an acidic catalyst in the presence or absence of a solvent to produce tocopheryl acetate.

7. (Previously presented): A process according to claim 1, wherein the sulphur(VI) containing catalyst of the formula R^1SO_2OH used in the C-alkylation is selected from the group consisting of sulphuric acid, fluorosulphonic acid, methane- or ethane-sulphonic acid, trifluoromethanesulphonic acid and benzene- or p-toluenesulphonic acid.

8. (Previously presented): A process according to claim 1, wherein the aprotic organic solvent used in the C-alkylation is a polar aprotic organic solvent, or is a non-polar aprotic organic solvent, or is a biphasic solvent system containing both kinds of aprotic organic solvents.

9. (Previously presented): A process according to claim 1, wherein the sulphur(VI) containing catalyst of the formula R^1SO_2OH used in the C-alkylation is present in an amount of from about 0.01 mol.% to about 1 mol.% based on the molar amount of phytol or isophytol, whichever is employed.

10. (Previously presented): A process according to claim 1, wherein the C-alkylation is effected at temperatures from about 20°C to about 160°C.

11. (Previously presented): A process according to claim 1, wherein the phytyl halide used in the O-alkylation is phytyl bromide or phytyl chloride.

12. (Previously presented): A process according to claim 1, wherein the base used in the O-alkylation is sodium hydride.

13. (Previously presented): A process according to claim 1, wherein the aprotic organic solvent used in the O-alkylation is a polar aprotic organic solvent.

14. (Previously presented): A process according to claim 1, wherein the base for the O-alkylation is used in excess relative to the amount of 2,3,6-trimethylhydroquinone-1-acetate.

15. (Previously presented): A process according to claim 1, wherein the O-alkylation is effected at temperatures from about -20°C to about +30°C.

16. (Previously presented): A process according to claim 1, wherein the rearrangement reaction following the O-alkylation is suitably performed in the presence of an acidic catalyst, in an aprotic organic solvent and at temperatures below about 20°C.

17. (Previously presented): A process according to claim 16, wherein the aprotic organic solvent is an alkane; a halogenated alkane; or a mixture of these two types of aprotic organic solvents.

18. (Previously presented): A process according to claim 16, wherein the rearrangement reaction is performed at temperatures from about -28°C to about -23°C.

19. (Previously presented): A process according to claim 1, wherein the ring closure is effected by treating said acetate with an acidic catalyst which is a sulphur(VI) containing catalyst of the formula R^1SO_2OH wherein R^1 signifies hydroxy, halogen, lower alkyl, halogenated lower alkyl or aryl.

20. (Previously presented): A process according to claim 1, wherein the ring closure is effected in a polar aprotic organic solvent.

21. (Previously presented): A process according to claim 1, wherein the catalyst used in the ring closure is present in an amount of from about 0.01 mol.% to

about 10 mol.% based on the molar amount of the 3-phytyl-2,5,6-trimethylhydroquinone-1-acetate.

22. (Previously presented): A process according to claim 1, wherein the ring closure reaction is effected at temperatures from about 20°C to about 160°C.

23. (Original): The compound 3-phytyl-2,5,6-trimethylhydroquinone-1-acetate, including each of its stereoisomers (E,all-rac)-3-phytyl-2,5,6-trimethylhydroquinone-1-acetate, (Z,all-rac)-3-phytyl-2,5,6-trimethylhydroquinone-1-acetate, (E,R,R)-3-phytyl-2,5,6-trimethylhydroquinone-1-acetate and (Z,R,R)-3-phytyl-2, 5, 6-trimethylhydroquinone-1- acetate.

24. (Original): The compound 4-hydroxy-2,3,6-trimethyl-5-[3-(4,8,12-trimethyltridecyl)-but-3-enyl]phenyl acetate.

25. (Previously presented): A process according to claim 4, wherein the 3-phytyl-2,5,6-trimethylhydroquinone-1-acetate or an isomer thereof is (*Z*)-4-hydroxy-2,3,6-trimethyl-5-(3,7,11,15-tetramethylhexadec-3-enyl)-phenyl acetate, (*E*)-4-hydroxy-2,3,6-trimethyl-5-(3,7,11,15-tetramethylhexadec-3-enyl)-phenyl acetate, or 4-hydroxy-2,3,6-trimethyl-5-[3-(4,8,12-trimethyltridecyl)-but-3-enyl]-phenyl acetate.

26. (Previously presented): A process according to claim 8, wherein the polar aprotic organic solvent is an aliphatic or cyclic ketone; an aliphatic or cyclic ester; or a dialkyl or alkylene carbonate; and the non-polar aprotic organic solvent is an aliphatic hydrocarbon or an aromatic hydrocarbon.

27. (Previously presented): A process according to claim 26, wherein the aliphatic or cyclic ketone is diethyl ketone, isobutyl methyl ketone, cyclopentanone, or isophorone; the aliphatic or cyclic ester is ethyl acetate, isopropyl acetate, or *γ*-

butyrolactone; the dialkyl or alkylene carbonate is dimethyl carbonate, diethyl carbonate, ethylene carbonate, or propylene carbonate; the aliphatic hydrocarbon is hexane, heptane, or octane; and the aromatic hydrocarbon is benzene, toluene, or xylene.

28. (Previously presented): A process according to claim 8, wherein the aprotic organic solvent used in the C-alkylation is a biphasic solvent system containing ethylene and/or propylene carbonate as the polar aprotic organic solvent and hexane, heptane, or octane as the non-polar aprotic organic solvent.

29. (Previously presented): A process according to claim 9, wherein the sulphur(VI) containing catalyst of the formula R^1SO_2OH used in the C-alkylation is present in an amount of from about 0.05 mol.% to about 0.1 mol.% based on the molar amount of phytol or isophytol, whichever is employed.

30. (Previously presented): A process according to claim 10, wherein the C-alkylation is effected at temperatures from about 80°C to about 150°C.

31. (Previously presented): A process according to claim 30, wherein the C-alkylation is effected at temperatures from about 100°C to about 127°C.

32. (Previously presented): A process according to claim 13, wherein the polar aprotic organic solvent is selected from the group consisting of an aliphatic or cyclic ketone; an aliphatic or cyclic ester; a dialkyl or alkylene carbonate; and a dialkylformamide.

33. (Previously presented): A process according to claim 32, wherein the aliphatic or cyclic ketone is diethyl ketone, isobutyl methyl ketone, cyclopentanone, or isophorone; the aliphatic or cyclic ester is ethyl acetate, isopropyl acetate, or *γ*-

butyrolactone; the dialkyl or alkylene carbonate is dimethyl carbonate, diethyl carbonate, ethylene carbonate, or propylene carbonate; and the dialkylformamide is dimethylformamide or dibutylformamide.

34. (Previously presented): A process according to claim 14, wherein the base for the O-alkylation is used in a molar excess of about 5 to about 30% relative to the amount of 2,3,6-trimethylhydroquinone-1-acetate.

35. (Previously presented): A process according to claim 34, wherein the base for the O-alkylation is used in a molar excess of about 10 to about 20% relative to the amount of 2,3,6-trimethylhydroquinone-1-acetate.

36. (Previously presented): A process according to claim 15, wherein the O-alkylation is effected at temperatures from about -10°C to about +15°C.

37. (Previously presented): A process according to claim 1, wherein the O-alkylation is effected at temperatures from about 100°C to about 127°C.